

RCRA REVISION CHECKLIST 169

Petroleum Refining Process Wastes

63 FR 42110-42189

August 6, 1998

(RCRA Cluster IX, HSWA/Non-HSWA provisions)

Note: The revisions to 40 CFR 261.32, Part 261 Appendix VII, 268.35 and 268.40 are promulgated pursuant to HSWA. These regulations become effective on the Federal effective date in all States. The revision to 40 CFR 266.100 is promulgated pursuant to HSWA, but it is optional for adoption. The revisions to 40 CFR Part 261.3, 261.4, and 261.6 are promulgated relative to non-HSWA authority. The non-HSWA revisions related to the exclusions from the definition of solid waste of certain oil-bearing hazardous secondary material from petroleum refining and certain recovered oils from associated petrochemicals are optional. The addition of 40 CFR 261.4(a)(19) is a clarifying change and States are not required to make it because they do not need further authorization to interpret their regulations in accordance with this clarification. Those provisions designated as HSWA are identified by a "♦" (diamond symbol) in this checklist.

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
PART 261 - IDENTIFICATION AND LISTING OF HAZARDOUS WASTE						
SUBPART A - GENERAL						
DEFINITION OF HAZARDOUS WASTE						
insert “, provided that the wastes...separation” after “§ 261.32”; insert “crude oil storage tank sediment ... (EPA Hazardous Waste No. K172)” after “(EPA Hazardous Waste No. K050)”	261.3(a)(2)(iv)(C)					
replace “§ 261.6(a)(3)(iv) through (vi) “with “§ 261.6(a)(3)(iii) and (iv)”	261.3(c)(2)(ii)(B)					

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FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
† add new subparagraph; catalyst inert support media separated from wastes listed in § 261.32 – Spent hydrotreating catalyst and spent hydrorefining catalyst	261.3(c)(2)(ii)(E)					

EXCLUSIONS

†,2 completely revise 261.4(a)(12) as 261.4(a)(12)(i)&(ii); oil- bearing hazardous secondary materials generated at petroleum refinery and inserted into the refining process unless the material is placed on land or speculatively accumulated before recycled; non- characteristic materials inserted into thermal cracking units; oil-bearing hazardous secondary materials inserted into same refinery where generated, or sent directly to another refinery; oil- bearing hazardous secondary materials generated elsewhere in petroleum industry are not excluded; residuals generated from materials excluded under 261.4(a)(12)(i) that would have otherwise met listing under 261 subpart D, are designated as F037 listed wastes when disposed of or intended for disposal	261.4(a)(12)(i)					
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RCRA REVISION CHECKLIST 169: Petroleum Refining Process Wastes (cont'd)

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
†,2 recovered oil recycled in same manner and conditions as in 261.4(a)(12)(i); recovered oil is oil reclaimed from secondary materials generated from normal petroleum industry practices; recovered oil does not include oil-bearing hazardous wastes listed in 261 subpart D, however, oil recovered from such wastes may be considered recovered oil; recovered oil does not include used oil as defined in 279.1	261.4(a)(12)(ii)					
† add new paragraph; petrochemical recovered oil from associated organic chemical manufacturing facility, where oil is inserted into refining process with normal process streams provided:	261.4(a)(18)					
† oil is hazardous only because it exhibits characteristic of ignitability and/or toxicity for benzene; and	261.4(a)(18)(i)					
† oil generated is not placed on land or speculatively accumulated before recycled; definitions of “associated organic chemical manufacturing facility” and “petrochemical recovered oil”	261.4(a)(18)(ii)					

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FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
† add new paragraph; spent caustic solutions from petroleum refining liquid treating processes used as feedstock to produce cresylic or naphthenic acid unless material is placed on land or accumulated speculatively as defined in 261.1(c)	261.4(a)(19)					

REQUIREMENTS FOR RECYCLABLE MATERIALS

† at end of paragraph, replace “; and” with a period	261.6(a)(3)(iv)(C)					
†,2 remove	261.6(a)(3)(v)					

SUBPART D – LISTS OF HAZARDOUS WASTES

HAZARDOUS WASTES FROM NON-SPECIFIC SOURCES

†,3 revise entry for F037; remove colon after “those generated in”; replace period with a comma after “receiving dry weather flow”; use lower case with “Sludge”; add new sentence to end of description regarding the inclusion of excluded residuals generated from processing or recycling oil-bearing hazardous secondary materials if to be disposed	261.31(a)					
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RCRA REVISION CHECKLIST 169: Petroleum Refining Process Wastes (cont'd)

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
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HAZARDOUS WASTES FROM SPECIFIC SOURCES

♦ add following waste streams to subgroup "Petroleum refining", in alphanumeric order	261.32					
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Industry and EPA hazardous waste No.	Hazardous Waste	Hazard code
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Petroleum refining:

- K169 Crude oil storage tank sediment from petroleum refining operations (T)
 K170 Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations .. (T)
 K171 Spent Hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media). (I,T)
 K172 Spent Hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media). (I,T)

APPENDIX VII TO PART 261

BASIS FOR LISTING HAZARDOUS WASTE

♦ add to appendix in alphanumeric order, the following waste streams to subgroup "Petroleum refining"	261 Appendix VII					
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EPA hazardous waste No.	Hazardous constituents for which listed
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- K169 Benzene.
 K170 Benzo(a)pyrene, dibenz(a,h)anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, 3-methylcholanthrene, 7,12-dimethylbenz(a)anthracene.
 K171 Benzene, arsenic.
 K172 Benzene, arsenic.

PART 266 – STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES

SUBPART H – HAZARDOUS WASTE BURNED IN BOILERS AND INDUSTRIAL FURNACES

APPLICABILITY

♦,†,1, replace "261.6(a)(3)(iv) through (vi)" with "261.6(a)(3)(iii) and (iv)"	266.100(b)(3)					
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RCRA REVISION CHECKLIST 169: Petroleum Refining Process Wastes (cont'd)

FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
			EQUIV- ALENT	LESS STRIN- GENT	MORE STRIN- GENT	BROADER IN SCOPE
PART 268 – LAND DISPOSAL RESTRICTIONS						
SUBPART C – PROHIBITIONS ON LAND DISPOSAL						
WASTE SPECIFIC PROHIBITIONS-PETROLEUM REFINING WASTES						
add new paragraph; effective February 8, 1999, wastes K169-K172, soils and debris contaminated with these wastes, radioactive wastes mixed with these wastes, and soils and debris contaminated with radioactive wastes mixed with these wastes are prohibited from land disposal	268.35(a)					
add new paragraph; requirements of 268.35(a) do not apply if:	268.35(b) intro					
wastes meet treatment standards specified in 268 subpart D;	268.35(b)(1)					
exemption from a prohibition pursuant to petition granted under 268.6, with respect to wastes and units covered by the petition;	268.35(b)(2)					
wastes meet treatment standards established pursuant to petition granted under 268.44;	268.35(b)(3)					
hazardous debris meeting treatment standards in 268.40 or alternative treatment standards in 268.45; or	268.35(b)(4)					

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FEDERAL REQUIREMENTS	FEDERAL RCRA CITATION	ANALOGOUS STATE CITATION	STATE ANALOG IS:			
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♦ extension to effective date of prohibition granted pursuant to 268.5, with respect to wastes covered by extension	268.35(b)(5)					
♦ add new paragraph; to determine if hazardous wastes identified in 268.35 exceeds 268.40 treatment standards, initial generator must test waste, or use knowledge of waste; if waste contains constituents in excess of UTS levels of 268.48, waste is prohibited from land disposal, and all requirements of part 268 are applicable, except as otherwise specified	268.35(c)					

SUBPART D – TREATMENT STANDARDS

APPLICABILITY OF TREATMENT STANDARDS

♦,5 add in alphanumeric order new entries for K169, K170, K171, and K172 as shown at 63 FR 42187	268.40/Table					
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¹ The internal reference to "§261.6(a)(3)(iv) through (vi)", as affected by Revision Checklist 135, was incorrect in the July 1, 1997, CFR. The reference should have been "§261.6(a)(3)(iii) through (v)" to correctly correspond to the deletion of subparagraphs in 40 CFR 261.6(a)(3) by Revision Checklists 112, 135, and 142B. Not all of these checklists made the corresponding changes to the internal references at 40 CFR 261.3(c)(2)(ii)(B) or 266.100(b)(3); therefore, the internal reference has remained incorrect in the CFR since July 1, 1993. Revision Checklist 169 subsequently corrects the internal references at both provisions to also reflect the removal of 40 CFR 261.6(a)(3)(v).

² The optional revision of the exclusion at 40 CFR 261.4(a)(12)(i)&(ii) replaces the provision at 40 CFR 261.6(a)(3)(v) causing this later provision to be removed; therefore, these changes should be adopted together. States should be aware that adoption of the removal of 40 CFR 261.6(a)(3)(v) without the adoption of the revisions to 40 CFR 261.4(a)(12)(i)&(ii) would make the State potentially broader-in-scope than the Federal requirements. The correction of the internal reference to "261.6(a)(3)(iv) through (vi)" at 40 CFR 261.3(c)(2)(ii)(B) is also optional but should be made if

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the revisions to 40 CFR 261.4(a)(12)(i)&(ii) are adopted. Although the revision of the internal reference at 40 CFR 266.100(b)(3) is made pursuant to HSWA authority, it is also optional since the revision should be made only if the revisions to 40 CFR 261.4(a)(12)(i)&(ii) are adopted.

- ³ This change is conditionally optional. If a State chooses to make the optional changes at 40 CFR 261.4(a)(12), it needs to make this change as well.
- ⁴ The 1997 40 CFR reprints 40 CFR 268.35 (which was removed by the rule addressed by Revision Checklist 157), and includes a note that the section has been removed effective August 11, 1997 (62 FR 26022, 5/12/97). Since it was promulgated after the effective date of the removal, Revision Checklist 169 adds a new 40 CFR 268.35.
- ⁵ Note that the August 6, 1998 rule (Revision Checklist 169) republished the appropriate footnotes to the Table of Treatment Standards at 40 CFR 268.40 without change.